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ABSTRACT

A theoretical framework for the process of faculty renewal in the 1980s was proposed, based on examination of the role of department heads as in-house agents of change for staff development. Support for the theory was sought using three empirical statements to test the relationship of department heads' manipulative orientation and social insight to the role and personal power attributed them by faculty. It was proposed that the greater the department head's social insight and persuasive tactics (Machiavellianism), the greater the power attributed them by faculty. A sample of 37 department heads and 276 faculty members were administered the Mach V for Machiavellianism, the Chapin Social Insight Test, and the Attributed Power Scales. The following variables were assessed: personal leadership, teaching and curriculum logistics, faculty career status, control of extracurricular resources, research resources, extra compensation, and committee shared concerns. Based on the findings, it was concluded that the manipulative skill of department heads does affect the power attributed to them by faculty, but only in those areas of immediate concern to the career of the faculty member. Social insight alone appeared to have limited value in increasing the power of department heads except in teaching and curriculum logistics. (SW)

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PAPER TITLE: UNIVERSITY DEPARTMENT HEADS: AGENTS OF CHANGE

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UNIVERSITY DEPARTMENT HEADS: AGENTS OF CHANGE

(PRECIS)

The author establishes a theoretical framework for the process of faculty renewal in the 80's based on examination of the role of department heads as in-house agents of change for staff development. Support for the theory is sought using three empirical statements to test the relationship of department heads' manipulative orientation and social insight to the role and personal power attributed them by faculty. A contour mapping technique is used to illustrate the nature of interaction effects. While statistically significant results confirm the general direction of the hypotheses, the strength of all relationships with respect to the amount of variance accounted for in the dependent variables by the independent variables is low. Based on the direction of the findings, additional research is recommended in laboratory and/or field settings.

UNIVERSITY DEPARTMENT HEADS: AGENTS OF CHANGE

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Perspective and Purpose

The primary functions of the university are the discovery and dissemination of knowledge. These functions are the responsibility of a faculty supported by a learned and facilitative administration. At times, especially when funds for new positions are unavailable and a glutted market restricts the movement of faculty, these functions may be placed in jeopardy. Tenured-in faculties with little interest left in their fields and with no opportunity for relocation are subject to insidious obsolescence. Without new positions and replacement opportunities, administrators must renew the enthusiasm of their present faculties for the university's functions.[1]

One of the means by which faculty renewal can be accomplished is through staff development sponsored by the university. This method, however, is somewhat alien, particularly in its industrial varieties, to the university environment, for professional growth of faculty has traditionally been considered a personal responsibility. The key to the success of such developmental programs, we believe, is the department head and the head's relationship

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[1]J. C. Goff, Toward Faculty Renewal (San Francisco: Jossey-Bass, Inc.), 1975, Ch. 1.

to departmental faculty, a relationship based upon interpersonal prestige and influence rather than upon coercion.

Support for this belief appears in the work of Hill and French who found that department heads were viewed as the least powerful figures in the hierarchical structure of the university.[2] The professoriate perceived themselves as wielding more power in the hierarchy than the department chairperson. (Power was defined in the study as the sanctions others in a social situation perceive that an individual has available to employ in ways that will affect them.) This finding implies that department heads who wish to produce change in faculty behavior must use other than position power, the sanctions of office, to be effective. And, since the university tends to be a political system, rather than a bureaucratic system, the medium of exchange is persuasion rather than coercion.

Throughout the past several centuries, the master strategist of persuasion has been Machiavelli. His works--The Prince and The Discourses--are often cited as the sources to consult in learning to apply the art of manipulation. Christie and Geis used these sources in the development of the Mach V, an instrument designed to test the hypothesis that those who believe in the precepts of

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[2]W. Hill and W. I. French, "Perceptions of the Power of Department Chairmen by Professors," Administrative Science Quarterly, 11, No. 4 (1967), 558.

Machiavelli would be able, in a laboratory setting requiring face-to-face interaction, latitude for improvisation, and irrelevant affect, to persuade others to their point of view in a win/lose game situation.[3]

In these laboratory win/lose situations, manipulation is the only means of power over the opponent. The objective of the game is to get one's opponent to behave in a manner conducive to one's winning. In such situations, high Mach subjects tend to control their opponents and the outcomes. Based on these findings, it would seem probable that in a low power position within the university hierarchy, a department head who was to serve as an agent of change would need persuasive power in one-to-one and/or group interactions with subordinates. The conditions conducive to successful strategies for winning by high Machs in the laboratory setting appear to duplicate themselves in the department head role position. In working with faculty, the department head must depend more on personal influence than role power to effect change in them. The manipulative skills of a high Mach department head would allow the securing of influence in the academic organization that subordinates would recognize, and for this reason faculty might attribute a high Mach department head more role and personal power than a low Mach department head in the same position.

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[3]R. Christie and F. Geis, Studies in Machiavellianism (New York: Academic Press, 1970), pp. 286-88.

While the possession of manipulative skills alone might explain some of the variance in faculty perceptions of department heads' power, we believed that those skills would be further enhanced by the department heads' insight into the needs and wishes of faculty. Such ability is an important tool of leadership, for the department head must be able to integrate the needs and abilities of subordinates with the overall needs and structures of the organization. To do this, the head must correctly perceive the rewards others desire and be able to mediate those rewards in order to be successful in any power attempts. Incorrect perception or insight regarding desired rewards, or failure to mediate them successfully for the dependent member, decreases the leader's power.[4] This perceptive skill should, when combined with the manipulative skills of the department head, offer an incumbent a greater measure of influence over faculty members.

As an empirical measure of such skill, Chapin designed the Social Insight Test.[5] It measures the ability "to sense what they (others) feel and think, and to predict what might be needed to bring about certain changes in any given situation, to improve it, perhaps, or to rectify disturbing tensions or conflicts."[6]

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[4]W. G. Bennis and H. A. Shepard, "Authority, Power and the Ability to Influence." Human Relations, 11 (1958), 143-55.

[5]F. S. Chapin, The Social Insight Test (Palo Alto, California: Consulting Psychologists Press, 1967).

[6]H. G. Gough, Manual: The Chapin Social Insight Test

This line of thinking led us to explore the association between the perceived power of university department heads by their faculties and (1) the department heads' skill in use of persuasive tactics (Machiavellianism) and (2) ability to analyze the thoughts, feelings, and behaviors (social insight) of departmental faculty. It was believed that if these relationships were sufficiently strong, these skills could then be acquired by department heads as means of increasing their influence over the staff development activities of their faculties.

Methodology

Three hypotheses were tested:

1. The greater the department heads' Machiavellianism, the greater the power attributed them by faculty.
2. The greater the department heads' social insight, the greater the power attributed them by faculty.
3. The greater the department heads' Machiavellianism and social insight, the greater the power attributed them by faculty.

The measures used were the Mach V[7] for Machiavellianism, the Chapin Social Insight Test[8] for social insight, and the Attributed Power Scales (APS) (derived from a factor analysis of the "Job Item Instrument," a revision

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(Palo Alto, California: Consulting Psychologists Press, 1968), p.1.

[7]Christie and Geis, op. cit., pp. 22-25.

[8]Chapin, loc. cit.

of the Hill and French "Available Power Instrument")[9] for power attributed to department heads by faculty.

Data were solicited by mailed questionnaire from a population of 44 department heads and their faculties in a large southeastern public university. Thirty-seven department heads and 276 faculty members participated in the study.

Subsequent to a factor analysis of the "Job Item Instrument," the hypotheses were tested as follows. The Statistical Analysis System (SAS) computer programming package was used to compute Pearson correlation coefficients for the faculty scores of the seven APS with the department heads' scores on each of the three Mach V scales (Total Mach V, Tactics, Views of Life) for the first hypothesis, and with the department heads' scores on the Chapin Social Insight Test (CSI) for the second hypothesis. For the last hypothesis, two types of multiple regression equations were computed. The first equation involved the prediction of the specific APS measure from the variables of Mach V and CSI. The second equation involved an interaction variable of Mach V X CSI in addition to the individual variables of Mach V and CSI. An F-test of the difference between the R-squares of these two equations was conducted to test whether the inclusion of the multiplicative term significantly increased the prediction of the APS measure. To further illustrate

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[9]Hill and French, op. cit., p. 553.

the exact nature of the interaction, a Surface Graphics System program[10] was used to display the contour configuration of the interaction terms (Sample Figure 1. Copies of other figures are available upon request.)

Results

The factor analysis of the "Job Item Instrument" yielded seven identifiable factors of department head power: (1) Personal Leadership, (2) Teaching and Curriculum Logistics, (3) Faculty Career Status, (4) Control of Extracurricular Resources, (5) Research Resources, (6) Extra Compensation, and (7) Committee Shared Concerns. Machiavellianism was found to be associated ($P < .05$) with factors 2, 3, 5, and 7; social insight was found to be associated ($p < .05$) with factor 2; and, significant ($p < .05$) interactions were found for factors 1, 2, 3, 4, and 6. However, while the findings were statistically significant, the magnitude of the correlation coefficients was small as were the increases in R-Squares. Details of these relationships follow.

Attributed power and Machiavellianism. To test the first hypothesis--the greater the department head's Machiavellianism, the greater the power attributed him/her by faculty--the correlations between each of the three measures of Machiavellianism and the seven attributed power measures were examined using a one-tailed test with alpha

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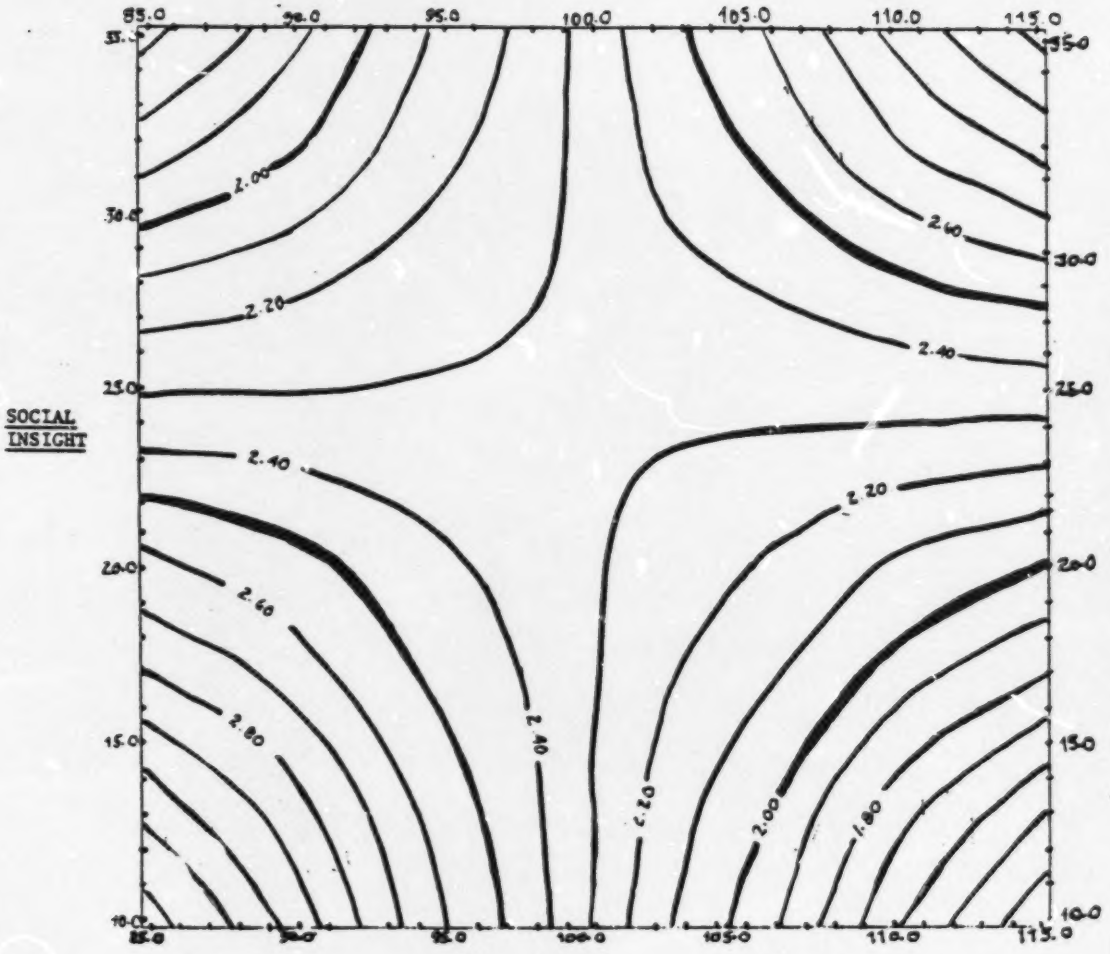
[10]R. J. Sampson, Surface II Graphics System (Kansas Geological Survey, Kansas University, 1978).



Y = 13.153564 + (MACH) -0.110930 + (CSI) -0.447992 + (MACH & CSI) 0.00450409

Y = 1.505985 + (MACH) 0.008490826 + (CSI) 0.002741978

Figure 1: CONTOUR SURFACE PLOT OF REGRESSION OF TOTAL MACH AND SOCIAL INSIGHT FOR APS 1, PERSONAL LEADERSHIP

SAMPLE FIGURE 1

equal to .05.

Table 1 contains the correlations between the three Mach measures and the seven attributed power measures. From the table, it is clear that the Total Mach scale shows a significant positive relationship to the APS measures of Teaching and Curriculum Logistics (r = +.13, p <.05), Faculty Career Status (r = +.12, p <.05), Research Resources (r = +.12, p <.05), and Committee Shared Concerns (r = +.18, p <.05).

Review of Table 1 also reveals that the Mach V measure, Views of Life, showed a significant positive relationship to the APS measures of Faculty Career Status (r = +.15, p <.05) and Committee Shared Concerns (r = +.12, p <.05).

It may be seen, too, that the Mach Tactics scale showed a significant positive relationship with the APS measures of Teaching and Curriculum Logistics (r = +.14, p <.05), Research Resources (r = +.14, p <.05), and Committee Shared Concerns (r = +.17, p <.05).

Attributed power and social insight. In the second hypothesis--the greater the department head's social insight, the greater the power attributed him/her by faculty--the CSI scores were correlated with the seven APS using a one tailed test with alpha equal to .05. From Table 1, it is clear that the only significant finding was a positive relationship between the CSI scale and the APS measure of Teaching and Curriculum Logistics (r = +.14, (p <.05).

TABLE 1

Correlation Coefficients for Attributed Power Scales and Machiavellianism and Social Insight

Variables	n[a]	Total Mach	Mach Views	Mach Tactics	Social Insight
Attributed Power Scales					
1. Personal Leadership	275	.05	.00	.04	.00
2. Teaching & Curriculum Logistics	276	.13*	.03	.14*	.14*
3. Faculty Career Status	276	.12*	.15*	.05	-.09
4. Control of Extracurricular Resources	275	-.05	-.17	.04	-.06
5. Research Resources	276	.12*	.00	.14*	.04
6. Extra Compensation	276	.00	-.12	.08	-.05
7. Committee Shared Concerns	276	.18*	.12*	.17*	.04
Mach V Scales					
Mach Views	36	.55*			
Mach Tactics	36	.80*	-.02		
Social Insight	37	-.05	.09	-.05	

a variations in n due to missing data

* $p < .05$; one tailed test

Attributed power and the interaction of Machiavellianism and social insight. In the third hypothesis--the addition to a multiple regression equation of the term for the interaction of the specific Machiavellian variable with the social insight variable will increase the prediction of each of the APS measures--the relationship of the three Mach interaction terms with the APS are examined. Table 2 contains the summary of F values for R-square increases for the APS measures resulting from the inclusion of the interaction terms in the regression equations. Examination of the table reveals that the addition of the Total Mach X CSI interaction term contributed significantly to the increase in prediction of the scores on the APS measures of Personal Leadership ($F = 7.885$, $p < .05$), Control of Extracurricular Resources ($F = 8.404$, ($p < .05$), and Committee Shared Concerns ($F = 5.119$, $p < .05$). All three of the interaction effects were of the same nature. At high levels of Total Mach, faculty perceived the department heads who had high social insight scores to have greater power than the department heads who had low social insight scores. At low levels of Total Mach, faculty perceived department heads who had low social insight scores to have greater power than the department heads who had high social insight scores.

The second Mach interaction term, Mach Views X CSI, contributed significantly to the prediction of the scores on the APS measures of Teaching and Curriculum Logistics ($F =$

TABLE 2

R-Square Increases and F Values for APS Using the Mach and CSI Interaction Term in the Regression Function

Faculty APS	Total Mach X CSI		Mach Views X CSI		Mach Tactics X CSI	
	F Ratio	R^2 Increase	F Ratio	R^2 Increase	F Ratio	R^2 Increase
1. Personal Leadership	7.885[a]	.0285	3.118	.0115	5.395[a]	.0197
2. Teaching and Curriculum Logistics	3.504	.0123	8.801[a]	.0309	.000	.0000
3. Faculty Career Status	.109	.0004	6.369[a]	.0226	.702	.0026
4. Control of Extracurricular Resources	8.404[a]	.0302	7.562[a]	.0226	3.599	.0132
5. Research Resources	.000	.0000	.756	.0028	.027	.0001
6. Extra Compensation	.375	.0014	.000	.0000	1.002	.0037
7. Committee Shared Concerns	5.119[a]	.0181	2.381	.0087	5.068[a]	.0180

a df (1, 268)

[a] $p < .05$, one tailed test

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8.801, p <.05), Faculty Career Status (F = 6.369, p <.05), and Control of Extracurricular Resources (F = 7.562, p <.05). For Teaching and Curriculum Logistics, at high levels of Mach Views, faculty perceived department heads who had low social insight scores to have greater power than the department heads who had high social insight scores. At low levels of Mach Views, the faculty perceived the department heads who had high social insight scores to have greater power than the department heads who had low social insight scores. For both Faculty Career Status and Control of Extracurricular Resources, at high levels of Mach Views, faculty perceived the department heads who had high social insight scores to have greater power than the department heads who had low social insight scores. Conversely, at low levels of Mach Views, faculty perceived the department heads who had low social insight scores to have greater power than the department heads who had high social insight scores.

The last Mach interaction term, Mach Tactics X CSI, contributed significantly to the increase in prediction for the APS measures of Personal Leadership (F = 5.395, p <.05) and Committee Shared Concerns (F = 5.068, p <.05). For both of these measures, at high levels of Mach Tactics, faculty perceived the department heads who had high social insight scores as having greater power than the department heads who had low social insight scores. At low levels of Mach Tactics, faculty perceived the department heads who had low social insight scores to have greater power than the

department heads who had high social insight scores.

Conclusions

From these findings it was concluded that the manipulative skill of department heads does affect the power attributed to them by faculty, but only in those areas of immediate concern to the career of the faculty member. Social insight alone appears to have limited value in increasing the power of department heads except in Teaching and Curriculum Logistics. By combining both Machiavellianism and social insight, department heads can increase their power, but only slightly, over faculty in Personal Leadership, Control of Extracurricular Resources, Teaching and Curriculum Logistics, Faculty Career Status, and Committee Shared Concerns. Overall, however, some increased work on the use of tactical manipulative skills would appear to be effective in increasing department heads' influence in effecting developmental changes in faculty members. Until more conclusive research data are available, however, administrators should consider additional factors in selecting and training deparment heads as in-house agents of change.

References

Bennis, W. G., and H. A. Shepard. "Authority, Power and the Ability to Influence," Human Relations, 11 (1958), 143-155.

Chapin, F. S. The Social Insight Test. Palo Alto, California: Consulting Psychologists Press, 1967.

Christie, R., and F. Geis. Studies in Machiavellianism. New York: Academic Press, 1970.

Goff, J. C. Toward Faculty Renewal. San Francisco: Jossey-Bass, Inc., 1975.

Gough, H. G. Manual: The Chapin Social Insight Test. Palo Alto, California: Consulting Psychologists Press, 1968.

Hill, W., and W. I. French. "Perceptions of the Power of Department Chairmen by Professors," Administrative Science Quarterly, 11, No. 4 (1967), 548-574.

Sampson, R. J. Surface II Graphics System. Kansas Geological Survey, Kansas University, 1978.